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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,527	09/05/2003	Mark W. Waldrop	937-1499	8768
23117	7590	12/12/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			CARRILLO, BIBI SHARIDAN	
			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/656,527	WALDROP ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sharidan Carrillo	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 13-24, 36 and 37 is/are pending in the application.
- 4a) Of the above claim(s) 3, 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 8-11, 13-24, 36 and 37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-11, 13-24, 36 and 37 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. The Bib Data Sheet needs to be amended because it recites an incorrect filing date of 9/6/2002 for provisional application 60/408604. According to the declaration, the filing date of the provisional application is 9/5/2002. Correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 is indefinite because it is unclear whether the percentage is expressed as weight or volume percent.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-2, 4, 10, 13-16, 20-22, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fusiak (5049300) in view of Sullivan (5232515).

Fusiak teaches a method of removing paint from wood and metal using acidified NMP (abstract, col. 2, lines 30-35). In reference to the pH adjuster, Fusiak teaches that NMP is acidified with an inorganic or organic acid having a pKa of less than 4.0. Fusiak fails to teach removing paint from plastic parts. Sullivan teaches removing paint from plastic parts (i.e. for use in automotive applications) using a composition comprising NMP (col. 1, lines 5-10, col. 4, lines 5-39). Sullivan further teaches removing paint from wood and metal.

It would have been obvious to a person of ordinary skill in the art to have modified the method of Fusiak to include stripping paint from plastic parts, as taught by Sullivan, since both Fusiak and Sullivan teaches suing NMP for stripping paint.

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In reference to claims 2 and 14, refer to col. 2, lines 29-31 of Fusiak. In reference to claim 10, refer to the teachings of Fusiak. In reference to claim 15, Fusiak teaches sulfuric acid, but fails to teach hydrochloric acid. Examples given include phosphoric acid and sulfuric acid. Since both hydrochloric acid and sulfuric acid have pKa values of less than 4, it would have been obvious to a person of ordinary skill in the art to have modified the method of Fusiak to substitute HCl for sulfuric acid since both HCl and sulfuric acid are mineral acids and have pKa values of less than 4. In reference to claim 16 and in view of the indefiniteness, the limitations are met by Fusiak. Additionally, adjusting the concentration of the acid would have been obvious absent any showing of criticality. In reference to claims 20 and 22, it would have been obvious to a person of ordinary skill in the art to have modified the method of Fusiak to include nylon and styrene since Fusiak in view of Sullivan teaches cleaning plastics and nylon and styrene are types of plastic materials. In reference to claim 21, refer to col. 4, lines 7-9 of Sullivan. In reference to claim 36, Fusiak teaches NMP, surfactant and mineral acids.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leon et al. (3338756).

Leon teaches a method of removing paint from plastic substrates using a composition comprising dimethylacetamide or dimethyl sulfoxide and phosphoric acid (col. 6, lines 30-40, col. 1, lines 15-17). Leon fails to teach hydrochloric acid. However, it would have been obvious and within the level of the skilled artisan to substitute

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phosphoric acid for equivalent hydrochloric acid since both acids are considered as mineral acids.

8. Claims 8, 17-19, 23 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fusiak (5049300) in view of Sullivan (5232515), as applied to claims 1-2, 4, 10, 13-16, 20-22, and 36 as described in paragraph 6 above, and further in view of Machac Jr. et al. (US2002/0198124).

Fusiak in view of Sullivan fails to teach ultrasonic energy or the surfactant recited in claim 37. Machac Jr. et al. teach stripping paint from automotive body parts using NMP (paragraphs 2 and 12) at an elevated temperature (paragraph 4) and with the use of sonication (paragraph 25). In paragraphs 19 and 22, Machac teaches surfactants including ethoxylated alcohols which are commonly used in paint removal. It would have been obvious to a person of ordinary skill in the art to have modified the method of Fusiak to include ultrasonic energy as taught by Machac, for purposes of enhancing the removal of paint from the substrate surface. It would have been obvious to a person of ordinary skill in the art to modify the surfactant of Fusiak to include conventional surfactants, such as ethoxylated alcohols, as taught by Machac, for purposes of enhancing paint removal. In reference to claim 17, Fusiak in view of Sullivan and Machac fail to teach the desired ultrasonic frequency. However, it would have been within the level of the skilled artisan to have adjusted the frequency depending upon the amount and contaminants present on the substrate surface. In reference to claims 18-19, Fusiak in view of Sullivan teaches using elevated temperatures to remove the paint. Machac teaches paint stripping at temperatures from 45-75 degrees centigrade.

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Machac further teaches that temperature conditions may vary (paragraph 25). It would have been obvious to a person of ordinary skill in the art to modify the method of Fusiak to include heating at elevated temperatures, as taught by Machac, for purposes of enhancing paint removal from the substrate surface. In reference to claim 23, Machac teaches application times of between 1 minute and 1 hour (paragraph 26). In reference to rinsing and drying refer to col. 4, lines 55-60 and claim 9 of Sullivan.

9. Claims 9, 11, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fusiak (5049300) in view of Sullivan (5232515), as applied to claims 1-2, 4, 10, 13-16, 20-22, and 36 as described in paragraph 6 above, and further in view of L'ohr et al. (5578135).

Fusiak in view of Sullivan fail to teach the limitations of claim 9. L'ohr teaches stripping the paint from plastic automotive parts using an organic solvent followed by treatment with the solvent in which stirring and thermal and mechanical energy are supplied to the part in order to remove the paint from the plastic part. L'ohr teaches comminution of the part in order to treat bulky plastic pieces. It would have been obvious to a person of ordinary skill in the art to have modified the method of Fusiak to include comminution as well as stirring, as taught by L'ohr, for purposes of effectively removing paint from the part and in order to treat bulky plastic pieces.

Fusiak in view of Sullivan teaches using elevated temperatures for paint stripping. In reference to claim 24, L'ohr teaches treating the plastic chips at elevated temperatures of 80-100 degrees centigrade for 15 minutes (abstract, col. 5, lines 45-48). It would have been obvious to a person of ordinary skill in the art to have modified



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the method of Fusiak to include elevated temperatures, as taught by L'ohr, for purposes of enhancing paint removal. In reference to step c of claim 24, L'ohr teaches filtering out the paint particles and flushing the plastic chips with water and further teaches drying the chips (col. 5, lines 5-27, and col. 6, lines 12-15). It would have been obvious and within the level of the skilled artisan to modify the method of Fusiak to include separating the paint and rinsing and drying the plastic chips, as taught by L'ohr, since such steps are conventional in the recycling and reclamation of plastic parts.

### ***Response to Arguments***

10. In view of the submission and review of the 1.131 Declaration, the rejections of the claims as being anticipated and obvious in view of Wiedeman and the secondary references are withdrawn. A new grounds of rejection has been made.

11. In reference to Leon, the rejection of claim 5 is maintained for the reasons set forth above. The rejection of all other claims, as being anticipated by Leon, is withdrawn in view of the newly amended claims.

12. The rejection of the claim 16, under 112, second paragraph, is maintained for the reasons set forth above.

This application contains claims 3, and 6-7 drawn to an invention nonelected with traverse in Office Action of 5/4/2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144)

See MPEP § 821.01.



Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 571-272-1297. The examiner can normally be reached on M-W 6:30-4:00pm, alternating Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sharidan Carrillo  
Primary Examiner  
Art Unit 1746

bsc



SHARIDAN CARRILLO  
PRIMARY EXAMINER